

[The Explosives and Weapons Forum](#) > [Chemistry for Amateur Experimenters and Citizen Scientists](#) > [Battlefield Chemistry](#) > FoxNews on Ricin

[Log in](#)

View Full Version : [FoxNews on Ricin](#)

Voyager

February 3rd, 2004, 06:03 PM

FoxNews seldom fails to make me laugh.

Ricin Easy to Make, Very Poisonous

Tuesday, February 03, 2004

As a weapon of terror, experts say ricin (search) has two big advantages: It is easy to make and frighteningly poisonous.

However, it is not nearly as worrisome as anthrax (search) and a short list of other biologically derived hazards and is unlikely to be used to cause large numbers of deaths.

Ricin is derived from castor beans (search). The poison is made from the waste left over when the beans are processed for their oil.

"It is easy to make. You can do it in your kitchen from castor beans," said Dr. Donna Seger of Vanderbilt University, president of the American Academy of Clinical Toxicology (search).

Though one of the most toxic natural substances, ricin poisoning is very rare and occurs mostly from accidentally chewing castor beans. One or two beans can be enough to cause death.

Ricin is most deadly if injected. Just 500 micrograms ♦ an amount about the size of the head of a pin ♦ can kill. In the most famous case of ricin poisoning, the Bulgarian dissident Georgi Markov (search) was killed in London in 1978 when jabbed with an umbrella that injected a ricin pellet under his skin.

Ricin can also be deadly if breathed. However, relatively large amounts are needed to do this. For instance, Seger points out that it would take hundreds of pounds of ricin to do as much damage this way as a couple of pounds of anthrax.

"It has always been a me-too in bioterrorism preparedness, a close second to the top tier," said Dr. Scott Lillibridge, director of the Center for Biosecurity and Disaster Preparedness at the University of Texas Health Science Center in Houston.

In 1999, the Centers for Disease Control and Prevention drew up a list of the most dangerous potential bioweapons: smallpox, anthrax, botulism, viral hemorrhagic fevers, plague and tularemia.

"It didn't make the A-list," said Lillibridge, who was the CDC's bioterrorism preparedness chief at the time. Nevertheless, "it always comes up in law enforcement and intelligence discussions because of its ease of access and development."

Experts say that ricin is probably most dangerous in small-scale, even one-on-one attacks and unlikely to ever be used in the kind of huge atrocities that are feared with smallpox.

"I don't believe ricin will ever be a weapon that will be formulated to cause large numbers of deaths or illness," said Dr. Michael Osterholm, a bioterrorism authority at the University of Minnesota.

Experts say that military analysis have reviewed the potential effects of releasing ricin into the air during battle. "In those situations, it would require the release of such a large amount that it is not felt to be a feasible weapon to kill people," said Dr. Greg Evans, bioterrorism chief at St. Louis University.

He noted that sprinkling ricin on the food in a salad bar could make many sick and kill some. But trying for a population-wide attack by poisoning food in a processing plant would be another matter.

"You would have to back a truck in there to get enough mixed in with large amounts of food so it wouldn't be diluted out," Evans said.

Symptoms of ricin poisoning usually develop within a few hours, depending on the means of exposure.

If inhaled, typical first symptoms would be difficulty breathing, fever, coughing and nausea. This could be followed by fluid buildup in the lungs, low blood pressure and eventual death.

People who swallow ricin would probably develop vomiting and diarrhea. This could lead to severe dehydration and low blood pressure.

There is no antidote for ricin. Treatment is supportive care, such as intravenous fluids and blood pressure medicine.

Article is here: <http://www.foxnews.com/story/0,2933,110337,00.html>

Video "How Ricin is Made" is here: http://www.foxnews.com/video2/set_cookie.html?6527&FOX_News_Live&How%20Ricin%20Is%20Made&acc

tom haggan

February 4th, 2004, 01:45 AM

Who ever pulled this stunt sounds like another dumbass drawing negative attention towards chemistry.

megalomania

February 4th, 2004, 04:32 PM

At least the pundits aren't billing ricin as the next worse thing to anthrax as I suspected they would be. They are actually getting good facts from scientists. I don't see any difference between ricin and, say, arsenic or cyanide really. I think the media people should point out that ricin is just a poison, not some bioweapon of mass destruction.

MrSamosa

February 4th, 2004, 09:29 PM

Why go Biological at all?? It's costly, it's difficult, the weapons are sensitive, so why dump Anthrax or Ricin in a letter and send it out?? I mean, it's really overkill, considering that it takes much less to kill a man.

I say, go Dusty Chemical. Why not dissolve Mustard onto some carrier, and send that? Or maybe Phosgene Oxime, which is a powder in itself. It doesn't have to kill... as a terror weapon, having a poor mail opener in such agony as CX would cause is far more effective. Of course, this does not rule out "kill gases," ala "Nerve Agents."

A little bit of a Nerve Agent, especially for VX (if possible), would go a long way. It could be diluted to hundreds of times its original volume, dissolved into some dusty carrier, and you have a near endless supply of mail-borne terror.

So why Biological?? Is it a lack of creativity, maybe?? Or do you think the guy didn't have the intention to kill, and just wanted to make a statement. I remember hearing a news story not too long ago about a disgruntled employee sending a vial of Ricin to his employer, with a warning "CAUTION- Do not open, Ricin!" Same thing, maybe?

Haggis

February 4th, 2004, 11:10 PM

From what I've heard, the sample they took that tested positive for ricin also tested negative a few times. This leads me to believe that the manufacture and purification was very crude. Possibly, it could have just been followed to filtering the acidified mixture and powdering the cake, or even simply using the de-oiled cake. If it tests negative, there should be a whole bunch of non-agent in the sample. Me thinks it was someone with a little bit of knowledge, and a good amount of stupidity, not a high class weapons lab.

EP

February 5th, 2004, 02:13 AM

My brother was watching MSNBC and a report on it mentioning the usual "info to make it can be found on the internet" stuff and it showed a brief shot of totse... :p

I'm glad nobody got hurt, but for some reason it still bothers me that these people are so incompetent that the best they can do is put it in an envelope...

PyroTech

February 5th, 2004, 09:14 AM

I remember a documentary on Discovery Channel about ricin. A man injected ricin in a coke can of the neighbours. He drilled a little hole, really tiny, and injected a unknown amount of ricin in the coke can. He closed the hole by using small amounts of glue. But in the movie of Fox the man says that having ricin in your drink is bad but not lethal. Maybe someone else has

some information on ricin poisoning?

The nice thing about ricin is that doctors can't find the cause of death, at least in many cases, because ricin destroys itself. The way of dying by ricin is not something you would wish for somebody. You literally shit your organs out.

Sorry for the unclear story, it has been a while since I saw that documentary.

Wild Catmage

February 5th, 2004, 09:40 AM

Ricin can also be deadly if breathed. However, relatively large amounts are needed to do this. For instance, Seger points out that it would take hundreds of pounds of ricin to do as much damage this way as a couple of pounds of anthrax.

First, how do I inhale hundreds of pounds of ricin?

Surely the capacity of my lungs would be less than the volume of a hundred pounds of ricin. Even inhaling a couple of pounds of anthrax (as suggested) would be very difficult :rolleyes:

This statement kind of works against the claims that ricin is "frighteningly poisonous".

Second, how much anthrax did the people that died from the "anthrax in the mail" events inhale?

PyroTech

February 5th, 2004, 09:51 AM

For instance, Seger points out that it would take hundreds of pounds of ricin to do as much damage this way as a couple of pounds of anthrax.

He's comparing the 2 compounds, ricin and anthrax. He doesn't mean that you'll need 100 pounds to kill one human being.

In my opinion this is an effective way to kill someone, wonder why it isn't used more often.

zeocrash

February 5th, 2004, 06:40 PM

I agree mrsamosa that bio weapons are quite sensitive

they do hold advantages over chemical weapons though, firstly some are contagious and therefore you get more casualties for your weapon (this refers of course only to live bioweapons, I realise that anthrax is not particularly contagious, but other bioweapons are). The attraction of ricin I guess is that it is relatively simple to make and that looking at the data sheets it looks incredibly deadly.

MrSamosa

February 5th, 2004, 10:34 PM

I just remembered a story from last year, about the assassination of one of the top Chechen guerilla commanders...

Someone sent him an envelope, which contained a letter coated with a poison that can penetrate the skin. I don't remember what the poison was, and the Chechens gave a communique saying it had DMSO on it. This is another option, rather than trying to form a dusty cloud of a Bio-Weapon the letter's opening... just poison the letter itself! Of course, this could easily be by-passed with decent gloves; but not before there are a few casualties (or if the letter itself does not cause alarm, and the poisoning is significantly delayed).